

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A process of manufacturing a roll punch used for forming partition walls of a plasma display panel, comprising the steps of:

coating a mask on an external surface of a forming roll;

partially removing the mask from said forming roll at regularly spaced positions using a laser beam or a cutting bite while rotating said forming roll, to properly adjust the intervals between the mask-free parts, thus forming an intermediate product having a plurality of mask-free parts formed as continuous circles around the forming roll; and

immersing the intermediate product in an etching tank, positioning at least one ultrasonic vibrator in the etching tank at a side other than the top or bottom of the immersion tank, and etching said intermediate product at the mask-free parts by radiating ultrasonic waves to produce grooves at properly adjusted intervals in the punch having a desired depth, thickness and sidewall inclination angle.

2. (Original) The process according to claim 1, wherein the partial removal of said mask from the forming roll at the regularly spaced positions is carried out by radiating a laser beam on the mask.

3. (Original) The process according to claim 1, wherein the partial removal of said mask from the forming roll at the regularly spaced positions is carried out by a cutting bite.

4. (Previously Presented) The process according to claim 9, wherein an inclination angle of each inclined sidewall of each of said partition wall forming grooves of the roll punch relative to a vertical reference line perpendicular to an external surface of lands between said forming grooves is 3° or less.

5. (Previously Presented) The process according to claim 9, wherein the partition wall forming grooves of the roll punch are fabricated such that a value of $[h/(b-a)]$ is 30 or more, wherein "h" is a height of each of the partition walls formed on the plasma display panel by said forming grooves of the roll punch, "b" is a width of a middle portion of said partition wall, and "a" is a width of a top portion of said partition wall.

6. (Currently Amended) The process according to claim 9, wherein the at least one ultrasonic vibrator includes two ultrasonic vibrators placed at ~~different~~ opposite sides of the intermediate product.

7. (Previously Presented) The process according to claim 9, wherein, prior to the step of completely removing the remaining part of said mask from the forming roll, the intermediate product is removed from the etching tank.

8. (Previously Presented) The process according to claim 1, wherein the etching step includes etching intermediate product at the mask-free parts within an etching tank provided with at least one ultrasonic vibrator by radiating ultrasonic waves from said at least one ultrasonic vibrator towards the mask-free parts while rotating said intermediate product, thus forming a plurality of partition wall forming grooves encircling said forming roll of the intermediate product.

9. (Previously Presented) The process according to claim 8, further comprising:

completely removing a remaining part of said mask from the forming roll having the partition wall forming grooves, thus finally producing a roll punch.

10. (Withdrawn) A plasma display panel produced by using a roll punch manufactured according to claim 1.